

419 disclosed in Figure 4 thereof does, or can, correspond to the frequency-limiting filter of the independent claims of the present application. The Kates '884 reference, however, discloses a similar filter that in Kates '884 is called an all-pole filter 114, and at column 7, lines 36-38, it is stated that, optionally, the all-pole filter 114 may not be frozen, but instead can vary slowly. This is stated to be responsive to an adaptive signal 112 based on the error signal 104, the feedback signal 108, or the like. Further details of the adaptive signal 112, however, are not provided in Kates '884.

Therefore, the comments below, although focusing on Kates '986, are equally applicable to Kates '884.

As argued in Applicant's previous response, the frozen filter does not adapt during operation of the hearing aid. As stated at column 8, lines 6-7, the frozen filter 419 is a slow-varying or non-varying filter. If the filter 419 is a non-varying filter, it clearly does not fall into the category of an "adaptive" filter. Even if the filter 419 is a slow-varying filter, there is no control input shown for the filter 419 in Figure 4 of the Kates '986 reference, and thus there is no disclosure in that reference as to how, if at all, the slow varying is accomplished. Additionally, the fact that the filters 421 and 423 in the Kates '986 reference are explicitly called "adaptive filters", whereas this terminology was not used to describe the filter 419, clearly indicates that Kates '986 did not consider the filter 419 as being an "adaptive" filter, nor would a person of ordinary skill reading the Kates '986 reference.

In the Final Rejection, in response to these arguments, the Examiner cited language at column 8, lines 16-19 as stating that the frozen filter 419 is disclosed as being changeable during operation. Applicant submits this statement does no more

than refer to the possibility of the frozen filter 419 slowly varying during operation, but this clearly does not make the frozen filter 419 a filter that adapts during operation of the hearing aid, and this is made explicitly clear in the other text surrounding the passage cited by the Examiner. As stated at column 8, line 12 of the Kates '986 reference, when the hearing aid 400 is first turned on, filter (pole) coefficients of the frozen filter 419 are adapted to model those aspects of the feedback path that can have high-Q resonance, but which stay relatively constant during normal hearing aid operation. The Kates '986 reference then further states that these pole coefficients of the feedback path, once determined, are modified and then frozen, or at least changed very slowly. The next sentence in the Kates '986 reference specifically contrasts this situation to the situation in the "true" adaptive filter 401, which states that the coefficients of the adaptive filter 401 are adapted to correspond to the modified poles. At column 8, line 22, the Kates '986 reference specifically states that, *unlike the filter coefficients of the frozen filter 419*, the adaptive filter 401 continues to adapt its filter coefficients in response to changes in the feedback path. Therefore, the adaptive filter 401 models those portions of the feedback path that remain essentially constant while the hearing aid is in use.

Applicant therefore submits that the Kates '986 reference itself not only makes clear that the filter 419 does not function in the manner of an adaptive filter, but also contrasts the operation of the filter 419 with that of the "true" adaptive filter 401.

Also in response to Applicant's previous arguments, the Examiner stated that the claims are not limited to an adaptive filter, but merely require that the filter be "adaptable." While that may be true, the language of claim 1, for example, explicitly states that the frequency-limiting filter compensates the feedback by frequency-

limiting the input to the adaptive feedback compensation filter formed by the amplified signal, and states that the filter function of the frequency-limiting filter is adaptable during this compensation. Applicant submits that the frozen filter 419 in the Kates '986 reference, according to the aforementioned passages, is explicitly stated to be incapable of performing such adaptable compensation.

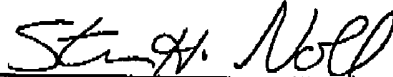
Additionally, as discussed at the interview, even if the Examiner considers the "slowly varying" feature of the filters disclosed in the Kates '884 and Kates '986 references to meet the language on this point in the independent claims, there is no teaching in either of those references that such slow varying, if it occurs, has anything to do with compensating feedback by frequency-limiting the input to the adaptive feedback compensation filter (this input being formed by the amplified output signal of the adaptive feedback compensation filter), as explicitly set forth in the independent claims. At the interview, Applicant offers to amend the language of the independent claims to delete the phrase "is adaptable" in the penultimate line of each of claims 1 and 35, and to replace that phrase with "adapts said frequency-limiting". At the interview, the Examiner suggested not making such an amendment in order to allow the Examiner to more thoroughly consider the Kates '884 and Kates '986 references. Applicant still would be agreeable to making such an amendment if, after such review, the Examiner believes such an amendment would assist in placing the claims in condition for allowance. As discussed at the interview, however, Applicant submits that the current language of the claims provides ample basis for allowability, for the reasons discussed above.

Applicants therefore respectfully submit that none of claims 1, 10-12, 14-36, 45-47 or 49-69 is anticipated by Kates '986, and none of claims 1-9 or 36-44 is anticipated by Kates '884.

As to the rejection under §103(a), Applicant does not have a significant disagreement with the Examiner's statements regarding the Weidner reference, but for the reasons noted above submit that even if the circuit disclosed in Kates '986 were modified in accordance with those teachings of the Weidner reference, the subject matter of claims 13 and 48 still would not result.

All claims of the application are therefore submitted to be in condition for allowance, and early reconsideration of the application is respectfully requested.

Submitted by,



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SCHIFF, HARDIN LLP
CUSTOMER NO. 26574
Patent Department
6600 Sears Tower
233 South Wacker Drive
Chicago, Illinois 60606
Telephone: 312/258-5790
Attorneys for Applicant.

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